ADDITIONS TO THE LAURACEAE OF GUATEMALA

Cyrus Longworth Lundell

LICARIA ALATA Miranda, Ceiba 4: 128. fig. 1954.

GUATEMALA: Dept. Peten, Lacandon, in high forest on El Caribal trail, about 3 km. sw., Feb. 16, 1962, Elias Contreras 3410 (LL), tree, 60 ft. high, 12 in. diam., fruit green, "laurel."

Described from Chiapas, the tree is new to the Guatemalan flora.

LICARIA GUATEMALENSIS Lundell, sp. nov. — Arbor parva, ramulis gracilibus, glabris; folia petiolis 5–8 mm. longis stipitata; lamina elliptica, oblongo-elliptica vel lanceolata, 10–25 cm. longa, 3–8 cm. lata, basi acuta, apice acuminata vel caudato-acuminata, glabra, chartacea, subtus reticulata; paniculae axillares, pauciflorae, 1–3 cm. longae, subsericeo-tomentellae, pedunculis gracilibus, usque ad 2 cm. longis; pedicelli 2–6 mm. longi; flores glabri subglobosi, 2.5–3 mm. longi, 2.5–3 mm. diametro, lobis carnosis, late ovatis, ca. 2 mm. latis; stamina inclusa, connata; ovarium glabrum.

GUATEMALA: Dept. Alta Verapaz, Sebol, about 800 m. west of the village, in high forest bordering arroyo, April 15, 1964, Elias Contreras 4322 (LL, type), tree, 5 in. diam., 35 ft. high, flowers reddish, "laurel."

The 8 to 10 primary veins of the leaf anastomose on the lower surface to form a conspicuous marginal vein 7 to 10 mm. from the edge. The secondary veins are less conspicuously reticulate. The short panicles are borne on sharply reduced axillary branches giving them the appearance of being fasciculate. In this characteristic and flower size the species resembles L. Peckii (Johnston) Kosterm.

LICARIA TRIANDRA (Sw.) Kosterm., Meded. Bot. Mus. Utrecht 42: 588. 1937 (Rec. Trav. Bot. Neerl. 34: 588. 1937).

GUATEMALA: Dept. Peten, Laguna Petexbatun, in high forest on the peninsula, April 2, 1964, C. L. Lundell 18178 (LL), tree, 35 ft. high, "laurel."

Kostermans identified L. triandra with L. coriacea (Lundell) Kosterm. (l.c., p. 604), but the two appear to differ in characteristics of the cupule. In Lundell 18178 the leaves are oblanceolate or narrowly elliptic, usually cuneate at base and often caudate-acuminate. Although only fruiting material is available, the collection is referred to this species.

NECTANDRA PETENENSIS Lundell, sp. nov. — Arbor parva, usque ad 6 m. alta, ramulis crassis, angulatis, minute adpresse tomentellis, cinereis; folia petiolis 1–1.5 cm. longis stipitata; lamina novella utrinque albido-cinerea, lanceolata vel elliptico-lanceolata, 15–30 cm. longa, 4.5–12 cm. lata, apice obtuse acuminata, basi acutiuscula, recurvata, subcoriacea, utrinque novella minute subsericea, axillas subtus barbata, penninervia, nervis 7–11-paribus; inflorescentia axillaris, multiflora, corymboso-paniculata, minute adpresse canescenti-tomentella, foliis multo brevior, pedicellis 5–8 mm. longis; flores hermaphroditi, albi, minute subsericeo-tomentelli, diam. 12–14 mm.; perianthii tubus brevissimus; limbi segmenta obovato-elliptica vel late ovata, intus papilloso-tomentella; antherae subsessiles, serierum exteriorum late obtusae, basi brevissime, seriei III. longius attenuatae, apice subtruncatae, glandulis sessilibus; staminodia parva; ovarium glabrum.

GUATEMALA: Dept. Peten, Rio Salinas, above mouth of Rio Pasion, on riverbank, Feb. 8, 1964, C. L. Lundell 17791 (LL, type), tree, 4 in. diam., 20 ft. high, flowers snow-white, "laurel."

The affinity of the species is to N. globosa (Aubl.) Mez as interpreted by Mez in his monograph. The cinereous young growth and the large snow-white flowers well-mark the species.

OCOTEA TRUNCATA Lundell, sp. nov. — Arbor parva, 5 m. alta, ramulis apice sericeis, gracilibus; folia petiolis 4–7 mm. longis stipitata; lamina oblanceolata, oblongo-oblanceolata vel anguste elliptica, 4.5–8.5 cm. longa, 2–3.3 cm. lata, apice subabrupte caudato-acuminata, basi cuneata, chartacea, subtus novella parce sericea, obscure reticulata, in costarum axillis pilosa, penninervia, nervis 5- vel 6-paribus; inflorescentia anguste paniculata, perpauci-flora, novella parce sericea, foliis brevior; flores glabri; perianthii tubus conspicuus; limbi segmenta ovata, ca. 1.4 mm. longa; stamina 1–1.3 mm. longa; antherae ovato-rectangulares ca. 0.75 mm. longae, apice subtruncatae; ovarium glabrum, apice truncatum.

GUATEMALA: Dept. Alta Verapaz, Chapultepec Farm, 62 km. from Coban, in low forest on top of hill, May 20, 1964, Elias Contreras 4731 (LL, type), small tree, 2 in. diam., 15 ft. high, "laurel."

The truncate ovary is distinctive. Past the flowering stage, the perianth and stamens are described from dried out flower parts persistent on the cupule. No staminodia were observed. The costa of the leaf is puberulent above, otherwise the upper surface is glabrous, drying blackish. The paler lower surface is glabrous at maturity except in the axils and along the midvein.

The relationship appears to be with O. effusa (Meissn.) Hemsl.

OCOTEA VENOSA Lundell, sp. nov. — Arbor ad 16 m. alta, ramulis crassis, angulatis, glabris; folia petiolis usque ad 2.2 cm. longis stipitata, glabra; lamina elliptica vel obovato-elliptica, 17–27 cm. longa, 8–15 cm. lata, apice subabrupte et obtuse acuminata, basi rotundata vel acutiuscula, omnino glabra, chartacea, nigra, utrinque prominenti-reticulata, penninervia, nervis 5–7-paribus subtus conspicue elevatis; inflorescentia axillaris, laxe paniculata, ad 25 cm. longa, nigra, glabra, pauciflora, subcymosa, pedunculo ad 12 cm. longo; flores glabri, pedicellis 3–7 mm. longis, gracilibus; perianthii tubus conspicuus; limbi segmenta ovato-elliptica, ca. 2 mm.; stamina ca. 1.5 mm. longa; antherae subovatae, ca. 0.75 mm. longae; filamenta ca. 0.5 mm. longa; staminodia stipitiformia, ca. 1 mm. longa; ovarium glabrum.

GUATEMALA: Dept. Alta Verapaz, Semococh, 16 km. from Sebol on Coban Road, in high forest on top of hill, May 14, 1964, Elias Contreras 4678 (LL, type), tree, 30 in. diam., 50 ft. high.

Related to O. Standleyi Allen, it differs at once in its thin leaves with 5 to 7 pairs of primary veins. Also, O. venosa is entirely glabrous, and all parts dry black. The leaf venation is conspicuous on both surfaces. Only remnants of the floral parts are present, and from these the stamen measurements were taken. The inner series has a pair of globose glands at base.

PERSEA FLAVIFOLIA Lundell, Contr. Univ. Mich. Herb. 6: 17. 1941.

GUATEMALA: Dept. Peten, Remate, on Tikal Road, about 8 km. ne. of the village, in high forest, April 27, 1960, Elias Contreras 903 (LL), tree, 20 in. diam., 90 ft. high, flowers yellow.

Described from Chiapas, this is the first record for the species in Guatemala. The Peten tree, collected in the lowlands, is less sericeous than the specimens from the mountains of Mexico, and the open panicles have long slender peduncles.

PHOEBE TRINERVIS Lundell, sp. nov. — Arbor parva, ramulis novellis apice minute albido-subsericeo-pubescentibus; folia petiolis 6–10 mm. longis stipitata; lamina lanceolata vel oblongo-lanceolata, 5–8.5 cm. longa, 1.5–3.3 cm. lata, apice longe acuminata, basi acuta, raro rotundata, triplinervia, subtus novella minute areolata, coriacea, adulta praeter costarum axillas subtus barbellatas utrinque subglabra; infructescentia anguste paniculata, glabra, foliis brevior; fructus immaturus ellipsoideus, ca. 1 cm. longus; cupula rubra, 4.5 mm. diam., integra; pedicelli fructiferi usque ad 5 mm. longi.

GUATEMALA: Dept. Peten, Tikal National Park, on Remate Road, in zapotal, Jan. 29, 1964, C. L. Lundell 17591 (LL, type), tree, 5 in. diam., 30 ft. high, cupules and pedicels bright red.

Apparently akin to P. salicifolia Nees, P. trinervis is known only from fruiting material. It has distinctive white sericeous buds and branchlets with sparse fine subappressed white subsericeous indument. The leaves, barbellate in the leaf axils beneath, are subappressed pubescent at first along the costa and primary veins on both surfaces. The perianth lobes do not persist at the apex of cupule, as in P. salicifolia.

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BOOK REVIEW

Alma L. Moldenke

"The Natural Geography of Plants", by Henry A. Gleason and Arthur Cronquist, viii + 420 pp., illustr. Columbia University Press, New York City, New York. 1964. $10.00

In this very interesting, easy reading and instructive book the "what", "where", "when", "how" and "why" (when known) of what makes up the "plantscapes" and the more naked landscapes of our world, and especially the North American continent north of Mexico, are very effectively treated. And many of the "whys" when not known are still asked in thought provoking manner.

In reference to distribution and range, emphasis is placed on the facts that plants determine the animals, that the total volume of vegetable matter is greater than that of animal sources, and that plants do not exert any territoriality as some animals do. But I wonder about certain plants whose sphere of growing influence, without perception of course, chases away certain other plants and/or animals.

Much of the basic information on plant migration may be condensed into the following quotes: "First, that all plants can and do migrate, although with various speeds and to various distances. Second, that all parts of the world are regularly planted, often unsuccessfully, with great numbers of seeds. Third, that the effect of short migrations depends on the time during which they are continued. Fourth, that the chance of a lucky accidental migration increases in proportion to the time available. And lastly, that we must never forget the importance of time in phytogeography." "The potential migration of most plants